Optimizing the User Experience in a Rapid Development Framework

DALLAS GENEALOGICAL SOCIETY: FOCUS GROUP 1 DISCUSSION

JULY 2008

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Introduction

IOGENE Project

The University of North Texas Libraries received a National Leadership Grant from the Institute of Museum and Library Services in December 2007 for a two-year project\(^1\) to identify the user interface requirements of genealogists interacting with the Libraries’ Portal to Texas History. The Portal provides users with a digital gateway to collections in Texas libraries, museums, archives, and historical societies, as well as to private collections. It contains primary source materials, including maps, books, manuscripts, diaries, photographs, and letters.

The IOGENE project involves genealogists in the design process beginning with the initial assessment of their requirements and continuing through usability testing of the redesigned Portal interface. The results of this study will provide the library community with information about the needs and interface requirements of a little-studied group of lifelong learners who comprise a significant proportion of digital library users. During February and March of 2008, three focus group discussions were held with members of northeast Texas genealogical societies. This is a report of the findings from the March 16, 2008 focus group discussion with members of the Dallas Genealogical Society.

Participants

Four members of the Dallas Genealogical Society participated in the discussion. Participants were females (\(N=4\)) over the age of 50 (Table 1).

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<thead>
<tr>
<th>Years</th>
<th>#</th>
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<tr>
<td>51 - 60</td>
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<td>61 - 70</td>
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Table 1. Age of Participants (\(N=4\))

On average, participants have been doing genealogical research for 14 years. Their experienced ranged from 10 to 20 years. One reported having a professional genealogical credential, which was membership in the Association of Professional Genealogists (APG), and two reported having memberships and affiliations with other state and national genealogical organizations.

Data Collection

The group discussion was led by the IOGENE project manager, who obtained each person’s written consent to participate. The discussion was recorded and the audio recordings were subsequently transcribed by the project manager.

A slide presentation was used to guide the discussion, which explored these areas of the user interface to the Portal to Texas History:

\(^1\) Since being funded, a more descriptive project name was created: IOGENE - Interface Optimization for Genealogists. [http://iogene.unt.edu](http://iogene.unt.edu)
1. Search  
   a. Search: Basic  
   b. Search: Advanced  
2. Search Results  
   a. Search Results: List View  
   b. Search Results: Grid View  
   c. Search Results: Facet View  
3. Descriptive Metadata  
4. Object Navigation  
5. Browse  

Participants completed a questionnaire (Appendix A) that identified demographic characteristics and captured their ratings of possible new features for the redesigned interface to the Portal to Texas History. Additionally, participants ranked their preferences from among five object navigation screen designs for the Portal (Appendix B).  

Data Analysis  
The discussion areas also provided the overall framework for analyzing the content: Search (basic and advanced), Search Results (list, grid, and facetted views), Descriptive Metadata, Object Navigation (photographs, maps, multi-page documents), and Browse. Within each of these areas, the discussion content was coded as it pertained to each of the following categories:  

- Preferences  
  Ideas, expectations, and preferred ways participants identified both for interacting with the Portal and for the Portal to function  
- Terminology  
  Terms used in the Portal’s interface that were not understood by participants, caused confusion, or were in some manner problematic  
- Help  
  Participants’ ideas regarding “help” features  
- Problems  
  Problems participants identified either with the Portal or particular to genealogical research  
- Suggestions  
  Participants’ ideas for additional features  

One additional category, called Experience, emerged during the initial focus group discussion and was added to subsequent analyses. This category included content related to the range of people comprising “genealogists”, in particular, demographic and research characteristics such as computer expertise, education, and age.  

The project manager and another project team member categorized the focus group content and resolved any areas of disagreement. The findings of the content analysis are reported in the next section. The findings are followed by a section reporting the ranked results for the prototype object.
navigation options and for the new feature options. The closing section includes a summary of the key findings.
Findings

Search: Basic

Preferences

- Many prefer to start their searching with an advanced versus a basic search

- One person generally only needs basic search: “place name or a person name”; this same participant found it “strange” that she could enter a plus sign in the basic search box but thought that was much easier to use than the longer advanced search screen
  
  o “I didn’t see any reason to do that [an advanced search] after I started using it [the plus sign in the Portal’s basic search]. And I don’t use it anymore.”

- Stemming
  
  o Use asterisk [*] to designate a root search, for example, ‘will*’; prefer to use wildcards, which is a familiar practice for genealogists
    
    ▪ Quote: “And normally I think most of us know enough to search, to get out as far as we possibly can before we have the wildcard to limit it.”

  o Stemming might produce unexpected results, for example, genealogists would use ‘William’ as a search term if they wanted that exact term and would not want the variations on the stem ‘Will’; would use a wildcard [*] to get search all terms beginning with the root

- Name searches
  
  o Most genealogists use wildcards; they are particularly familiar with using an asterisk and experimenting with the length of their search term to appropriately limit their results

  o Very desirable to all to have name searches that:
    
    ▪ Use wildcards
    ▪ Allow options to search using exact name term or soundex search
    ▪ Include common abbreviations for given names
    ▪ Include common nicknames for given names, for example, ‘Sarah’ could by ‘Sally’ and ‘Mary’ could be ‘Polly’ or ‘Molly’
**Terminology**

- **Creator**
  - Not sure what is meant by ‘creator’
  - How is ‘creator’ different from ‘author’?
  - Example: “Like, for example, a deed. Which person is it: Is it the county that created the deed? Is it the individual who wrote the deed, you know, the clerk? Is it the person that's the grantor or the grantee?”
  - One participant discovered that the value of ‘creator’ meant different things, for example ‘author’ or ‘agency’, for different objects in the Portal and concluded that whoever applied the metadata was unclear of the meaning of ‘creator’ or that it meant different things to the different people/organizations applying the metadata.

- **Metadata**
  - General concurrence that metadata is not clear to most genealogists, although one was familiar with the term.
  - One participant suggested using ‘all categories’ instead of metadata, to mean all the categories or elements in the metadata record; others thought this might not be meaningful.
  - Not certain what descriptive categories of interest to genealogists are included in metadata: Deeds? Marriages? Cemeteries?

- **Title**
  - One participant noted that at times title is ‘made up’.

**Problems**

- Inconsistent application of metadata for ‘creator’ makes discovery difficult.
  - Example: “This is really difficult because you have letters, you know, historical letters written from a person who was a particular government official to another person who's a government official, and so sometimes they’ll put it under his particular name and sometimes they’ll put it under the official capacity which he wrote the letter.”

- Rediscovery of a particular object by searching the ‘title’ field is successful only if the entire title is known, for example, it was previously written down.

- Spelling of names is problematic for genealogists. To deal with this they generally use wildcards.
Suggestions

- The card catalog for genealogy resources at Dallas Public Library is organized by county and then within county by ‘cemeteries’, ‘marriages’, ‘deeds’ and possibly other sub-categories of interest to genealogists. This organizational scheme might be of interest to explore further for metadata application.

- When searching for names also include common abbreviations for names, for example, Jno for John and Wm for William

Search: Advanced

Preferences

- Might use advanced search if looking for topical resources at a particular institution

- Add location field, particularly to limit search to a county, but preferably a city as well
  - Location should be as listed in the record, and not be the location of the institution holding the object

- Add historical period field, with options to designate:
  - Pre- or post-Republic -- In particular because the Portal is concerned with Texas history, allow this in lieu of users entering the date range for these periods
  - Civil War historical period
  - Reconstruction

- Boolean searches

- Exact phrase searches using quotations around phrase

- Using ‘advanced search’ features, like exact phrase, in the basic search screen
  - Quote: “I figure out ways to not go to [another] screen.”

- Help should be specific to a term, label, or entry box; specific help should not be embedded in a long narrative nor should it open in a separate window that requires users to leave the page they are working in to read the help information.
Help

- Need explanation for advanced search screen – not certain how to use it:
  - How to do Boolean searches involving more than one exact phrase or a term and an exact phrase

Problems

- Not certain what genealogical resources are on the Portal
- One participant was not certain what drop down menu would allow user to limit search to ‘maps’; another knew this limiter was in ‘type’ drop-down menu
- Uncertain how to search for photographs of a prominent Texan
- Having to re-enter date range to limit results to an historical period, like pre- or post-Republic
- One participant gets too many hits for ‘Nacodoches” and would like to limit the search to a particular historical period of interest, like, pre-Republic Texas
- It’s not clear how to search using either two exact phrases or one term and an exact phrase
  - Example: T G Harris – and – San Marcos
  - Do you put each phrase in quotes in the ‘exact phrase’ box? Would that work?
  - Can you put each phase in quotes in the basic search box?
  - Quote: “’Cause what I’m likely to do is [put] in all the words, just do that. Put "T G Harris" (quotes) AND (in caps) and then "San Marcos" and see what I get.”
- It can take a long time for search results to load because of the thumbnails; this is especially annoying when a search results contain many objects with the same thumbnail image, for example the STIRPES cover; the image was of no value to this user and the longer load time was annoying

Suggestions

- For type of materials to list in drop-down menu:
  - Family records, such as bible records
  - Wills that are in possession of a family member
  - Special collections, such as photographic collections
  - Papers
  - Diaries
• Correspondence
• Letters
• Family portrait collections
• Business collections
• Maps

• Help
  • Include an ‘i’ in a box at the end of field labels (an information box icon) or a ‘rollover’ feature for each term or box
  • Allow user to click to open help for a specific field (label or box) and click to close the help window
  • When help is needed open a small box with brief explanation – without disturbing the screen layout
  • Do not open a separate page
  • Do not open a long narrative
  • Quote: “It can be an ‘i’. It could be scroll over. But it would specific to that line or box, as opposed to a general help that’s a whole narrative.”

Search Results: List View

Preferences
• Number of search results to display
  • 10, 20, 25 search results is enough to display
  • Current Portal results have thumbnails and descriptive metadata; if there is only a title and brief description, then more could be displayed
  • Review a larger number of results quickly to determine if the results are of interest; quickly abandon search and do another
  • Displaying both the range of results in the current display and the total number of results is a desirable feature (e.g., 1-10 or 95)
• Include location for objects in search results, in particular include Texas County and if possible, include the township
• Include institution in search results

• Empty metadata fields in search result display for objects:
  o If date for an object is not known, include ‘nd’ in metadata record
  o Include some value rather than have blanks

• Thumbnails
  o One participant particularly disliked thumbnails, especially for multiple issues (volumes) of the same title, in particular, STIRPES
    ▪ Quote: “I like using, for example, WorldCat or you know many of those which come up, and it's just - it gives you the business right there. It's right there and you just go straight through it. And you bring up the next page and you go straight through it and I do that. And I find this actually patronizing, excuse me.”
    ▪ This same person thought thumbnails might be useful for maps and for letters
  o It is recognized that thumbnails are commonly used in search result displays by Amazon, ebay, and Google

• Clicking on thumbnail
  o One expected larger view of the thumbnail, whether a book cover or a photograph
  o Another expected to be taken to a journal (or document), with navigational ability to move through it
  o No single expectation: “Because at different sites you get different things.”

• Clicking on title
  o If document is digitized, then most expect to be taken to the first page of the document, with navigational ability to move through it

• Highlighting search terms
  o Very nice to indicate where search terms are in search results, for example, in title, description, etc.

• Geographical display of search results
  o Thought map might quickly become “overloaded”, in particular for commonly found words in Texas, like Bowie (i.e., most of the counties would have results)
• Value of Portal’s resources
  o Variance in views of how useful the materials are; however, those concerning history are generally considered important
  o Materials increase in value if they can only reasonably be accessed online, for example, because of distant location of source materials

• RSS
  o Some are unfamiliar with RSS
  o One person found it a useful feature, used it to download and listen to lectures and associated slides

• ‘Hits in text’ expected meaning:
  o Indicates that search term(s) are located in the text of the object
  o Expectation that clicking on ‘hits in text’ will take user to the first hit
  o Believe that most users will want to go directly to the first and then subsequent hits and will not be interested in other content or in the context of the hits

• Sorting search results
  o Sorting results according to relevance is good; relevance is defined as in Heritage Quest, that is, the most relevant are all terms found and the least relevant are single terms found in objects; not clear if this is how Heritage Quest establishes relevance, but exact phrases (e.g., James Montgomery) or search terms located adjacently should be the most relevant
  o Sorting by location, particularly by county, is important
  o Sorting by institution is important for these reasons:
    ▪ If several items of interest are from the same institution, person might like to see what else that institution holds or view the original item
      • Quote: “I do it by institution and I find out: "Well, guess what? SMU has got a lot of this stuff. I'll bet they've got something else.”
    ▪ If planning a trip to a particular location, person might like to stop at institutions that hold items of interest as they might have more items of interest in their collections
Problems

- In the absence of the location, particularly the Texas County, of an object, users unfamiliar with Texas will not get much from location data that is a part of the title.

- Date format for an object (i.e., 1961-12) is confusing; by convention this would read ‘1961 - 1912’, which would seem to be an error; some could infer the correct meaning of ‘December 1961’; one thought December should be used rather than ‘12’; one thought since ‘December’ was in the title, it could be omitted in date

- For a text document, when value for metadata field is not known, one questioned why this was, while others inferred the value was not included in the object itself

- Thumbnails
  - One person identified several problems with thumbnails:
    - Distracting
    - Take up a lot of space
    - Take a long time to load when user advances to the next page of search results
    - In particular, thumbnails of cover pages for journals are “useless”, and multiple displays of the same cover page appear to be quite annoying

- Search terms are sometimes but not always highlighted in results; sometimes they are highlighted in results but not in objects

- There is no ‘return to search results’ feature on object pages; this causes users to hit browser back button and if too many pages were viewed, users simply opt to or have to redo their search

Suggestions

- An option to exclude thumbnails from search results

- Option to use a map of Texas counties to begin a search, which would result in all objects related to that county being returned in the search results; follow-on searches could be done

- Add navigation among search result pages at both the top and bottom of all search result pages

Search Results: Grid View

Preferences

- Most have a preference for list view versus grid view
• One found grid view valuable when returning to the Portal and looking for a known item or when familiar with a “particular series of documents”; thought it would be quicker to locate in grid view because it is “a shorter version” than list view

• General agreement that useful candidate object types for grid view are:
  o Maps
  o Photographs

• Metadata fields to include
  o Are OK with fields containing no data (e.g., creator or date) being omitted from display
  o One, who thought she would only use grid view to revisit materials discovered earlier, preferred having limited fields and more icons
  o One thought ‘creator’ could be omitted
  o Another thought ‘location’ would be more valuable than ‘creator’
  o A few thought ‘title’ and ‘date’ were important
  o Institution is important for some
  o Generally, the fields to include are the same as those in list view; however, for quickly reviewing maps, photographs, and possibly finding familiar objects, there seems to be a preference for more objects and limited metadata

  ▪ Quote: “So, everything would come off except the title, I can get the other stuff by going back in the list view, if I need the rest of the stuff.”

Search Results: Faceted Results
In the discussion, participants were shown a screen image of search results from Calisphere\(^2\). The results were sorted into 3 categories by type: images, text, and websites. They were also shown the following list of descriptive metadata elements and asked to consider how useful these elements would be as possible facets for grouping their search results.

  • Place
  • Creation Date
  • Type/Format
  • Collection
  • Institution

\(^2\)
http://www.calisphere.universityofcalifornia.edu/
• Creator/Contributor/Publisher
• Subject

Preferences
• A few participants indicated faceted search results would be of interest to them
• One thought using ‘county’ as a facet would enable viewing results by Texas County (as well as relieve users of having to know how to spell county names)
  o One thought some ‘documents’ would be pertinent to more than one county
• Both name, particularly surname, and location, particularly county and township, are important facets. Can you present separate results by surname and by location?
  o Example: Houston: the surname, the city, the county
• One thought evaluating search results by each facet individually might be useful
• A few thought ‘type/format’ were very important facets; this would group results by:
  o Document
  o Book
  o Diary
  o Map
  o Picture
  o Photograph
• Author was mentioned by one participant and modified to also include compiler (as Author/Compiler), if the Portal includes any compilations
• Location of facets
  o Across the top of the screen if only a few categories
  o A few preferred on the side, especially if there are more than four categories
    ▪ One liked left, one left, and another did not care
• Ability to turn off faceted presentation and revert to list view is desirable
  o To scan the results for clues to refine search

3 Portal does include at least one compilation: http://texashistory.unt.edu/data/TBDP/HCGS/meta-pth-29408.tkl
To locate a previous result by remembered location on list

**Terminology**

- **Institution**
  - One person wondered if ‘institution’ meant “the place that donated or has control of the original document”; if so, then ‘contributor’ would be a better term
    - Quote: “Whatever you mean by that but the word 'institution' just doesn’t work for me.”
    - Example: “What if I had a collection of marriage records that I wanted to contribute. But I was going to retain custody of those records after I digitized them. Is my name going to go up there as the institution?”

- **Creator**
  - Quote: “What's the difference between 'creator', 'contributor', 'publisher' versus 'institution'?”
  - ‘Author’ could be ‘creator’

**Help**

- On mouse over, display definition for words, such as creator, contributor, publisher, and institution.

**Metadata**

**Preferences**

- Want to see all the metadata fields when click ‘more info’ link from search results
  - Quote: “Because that's going to give me hints on how to search further in the collection.”
  - Quote: “That's wonderful information.”

- Prefer to have the full display presented from ‘more info’ link, versus having an intermediate display that would have more metadata than presented in the search results but less than the full record display

- Hard to view the thumbnail in the metadata display and in the printout of metadata display; but size is OK for the screen

- Link location information to appropriate fields in object records
Quote: “You know we can get a link to MAPSCO to find out where this thing is.”

Link to Google maps or another map application
- For the institution holding an object
- For historical markers
- Not meaningful for all object types, for example, a book

Ability to edit metadata information:
- Quote: “Why would you want to let us edit it?” [Note: This rather sums up the dearth of discussion.]
- It’s a quality issue; might introduce errors

Ability to add comments:
- Would like to do this
- Want to view others’ comments
- Rootsweb and footnote .com comment features are examples:
  - Rootsweb: Can add post-em notes to objects; users see that an object has notes and can elect to view them or not
  - Footnote: Users ‘box in” text on hard-to-read documents and add ‘annotations’ to suggest the word(s) or to add comments about the person/name/etc.
    - The number of annotations is indicated in the record for an object
    - Only visible when moused-over
    - Are not printed with objects
- Include the number of annotations or comments users have added to the object in the object’s record
- Will need to monitor for quality control
  - Quotes: “You're gonna get annotations and notes that aren't right” . . . “and some wierdies”.

Registration
- Willing to do this in order to add comments/annotations
- Required by rootsweb, footnote, and others in order to add comments
- Quote: “It’s a quality control that you’re not just out there adding stuff. And it’s also a great feature because then if I go in and see somebody’s added a footnote, then I might contact that person -uh- for more information or say "What! My records don't show this." And you could communicate back and forth.”
- Privacy issues are addresses in different ways:
  - Communication is via email; email address is provided, name and address are not provided
  - Ancestry.com: option to communicate via email directly or more anonymously through their server
- Reporting errors
  - Want to do this; online form or email is fine
- Links in the metadata record
  - Icon (box with arrow):
    - Identify this as a link to somewhere outside the Portal
    - Expect this to link to “more information or something”
    - This is “very good”
  - Text links:
    - Identify these as links to somewhere outside the Portal

**Terminology**
- Permalink
  - Term is unfamiliar
  - Accurately guessed its meaning: “it’s gonna never be changed” and “we could use that when we cite”

**Problems**
- Printing record that is presented after clicking ‘more info’ in search results:
  - Prints records on two pages; wastes space on page, which wastes paper
• One participant suggested this might be a printer setup problem with the participant’s printer.
  
  o Includes a black border, which wastes space and paper
    ▪ This occurs with pages from an object and individual objects
    ▪ Quote: “Whatever you do, you see they've gone and bordered everything.”
  
  o Descriptive metadata breaks the text into a column, which wastes space; better to have it formatted to continue across the page width
  
  o Text does not need to be double-spaced
    ▪ Quote: “It's really good [information] but the printout formatting is poor.”

• Cannot cut and paste objects

• One person was confused by the Era=1939-Present; thought this implied the photo was from 1939
  
  o Object Permalink:
    http://texashistory.unt.edu/data/SUM2007/CCMH/folder_09/meta-pth-34453.tkl

Suggestions
• Metadata record
  
  o Provide a simple way to print or save this display
    ▪ Text format for saving is preferable
  
  o Provide save/export feature analogous to library furnished records – Advantages:
    ▪ Downloadable:
      • Either short or long version
        ▪ Include “where this document lives”
      • With or without description
    
    ▪ Classification code
  
    ▪ Text file that is easy to manipulate and import into any application, for example, WORD, Word Perfect
• Portal objects
  o Provide ability to download them, unless they are under copyright restriction
  o “Even cut and paste” ability would be good
  o PDF formats would be fine

• Metadata record and object
  o Quote: “I mean you may have - end up with five or six things that you wanna put into one document and bring it to the library or whatever. But, the actual image, it could be in PDF and then store it on the computer.”

• Comments
  o Ability to communicate with another user who has added comments of interest to an object

• Citations
  o Include citation with metadata record so that users can cut and paste it
    ▪ Ancestry.com provides a citation
    ▪ Handbook of Texas gives an explicit citation to use for objects
  o Standard(s)
    ▪ Include location of source and when accessed; Handbook of Texas does this
    ▪ Elizabeth Shown Mill’s “Evidence Explained” is the citation standard reference for genealogists

• Print format
  o Default to landscape printing when it is more economical
  o Print object metadata on one page
  o Test with more browsers than Internet Explorer, in particular Firefox and Safari
    ▪ Alert users if one of these 3 browsers is not supported
Object Navigation

Preferences

- For documents or books, it is desirable that clicking on the title or a thumbnail in search results brings up the page where the search term(s) or phrase is located.

- Flexible navigation features are desirable. For example, the Heritage Quest interface brings up the document and then allows navigation by:
  
  o browsing through pages

  o selecting from a linked list of document/book parts, in particular:
    
    ▪ the table of contents
    ▪ the index
    ▪ page numbers

  o jumping to a page

  o Hits - the first hit, next hit, etc.

- Metadata to display with objects

  o Location

  o Date

  o Indication of any annotations
    
    ▪ Indicate the number of annotations this object has
    ▪ Display the annotations on mouse over

  o Link to any comments

  o Institution holding source

    ▪ Not superimposed on object

- Quote: “The Dallas Public Library on their photographs that they hold in their collection, they do that because if you want one of their photographs, you have to buy it.”

- Would be willing to pay for a high quality print of images

  o Photographs and maps are good candidates
- Estimate of amount willing to pay:
  - $10 - $15.00
  - Suggest researching what other libraries and services charge
  - Thought maps could be expensive
- Printing objects, whether from display or saving them locally for later printing, is very important
- Citations
  - Standards used: Mills and Chicago
  - Inform users of what standard(s) Portal is using
  - Many people will take whatever they are given
- Zoom feature if quite important; seeing two sizes of image is of limited use
- Rotating images is important
- Use familiar controls to navigate images; not the arrows on example image
  - Move using a ‘hand’ icon: “If I just had my hand on it, I could move it over a little bit easier”.
  - Decrease and enlarge using magnifying glass icon
- Navigating multipage objects
  - Ability to find words within documents using the browser functions ‘Find in page’ and ‘Find again’, in particular using keyboard command ‘Control F’, is important; one person uses this to navigate documents
  - For less experienced users, provide explicit ‘find in page’ capability
  - For everyone, navigating quickly between hits in documents is important; this might be via:
    - On-screen ‘hit’ navigation: first hit, next hit, etc.

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4 Example was a map of Texas:
http://texashistory.unt.edu/permalink/meta-pth-19672:1

5 Example was Death Records, Hutchinson County, Texas:
http://texashistory.unt.edu/permalink/meta-pth-29408:1
- A browser’s ‘control F’, ‘find in page’, feature
- On-screen list of linked page numbers where hits are located
- One person familiar with the Portal indicated that if the search result for an object included ‘hits in text’, you could quickly navigate to the hits

- Page navigation via Sequence drop down box:
  - Some like it
    - Handy for finding pages listed in the Index for a document
    - If document contains an alphabetical listing, then can use to guess at page number
  - One did not like it and prefers using ‘control F’ navigation to move to the terms and page numbers in documents; saw no reason for the drop-down box
  - Include in the sequence menu numbers such as: i, ii, iii, iv, v, etc.
  - For pages with no page value of any kind, make up a value, such as ii, iii, etc.
- Ability to navigate documents by clicking on left and right edges is a helpful feature
  - Quote: “But since I don't know I can do it, it's not helpful.”
  - Alert users that this is possible, perhaps via directional arrows
- One wondered why blank pages were included in digital books; another responded that this was likely a function of automated digitization
- A few liked the thumbnail view of all pages
- Thumbnail view of all pages in a multi-page document or a book:
  - Some discussion of how to get additional information for citations; while a link to the citation could be on the page for less experienced users, general opinion was that:
    - The current ‘view the description’ link would suffice
    - A citation should be added to the description page
- All found it helpful to have search terms highlighted on pages with hits

---

6 May have been confused; appeared to think that users would have to enter the page number they wanted in the box next to the word ‘Sequence’.
Preference to use wildcards versus stemming for searching and to have the hits highlighted on pages

When formatting for printing, ensure that highlighted text on the screen is not blacked-out when printed; remove highlighting prior to printing

Take a look at how footnote.com handles navigating through multi-page objects
  - Uses a ribbon navigation at the bottom of a object display; the ribbon contains thumbnails of the other objects or pages in sequence
  - Enables movement among a group of pages
  - Examples: a multipage letter, a set of photographs, a series of pension applications

Terminology
  - Sequence
    - Not sure people will understand what that means
    - Suggest ‘page’ is a better word
    - Because all pages don’t have a value in the sequence listing, one user thought that selecting a known page number would not bring them to that page; rather, it would bring them to that page in the sequence of all the pages

Problems
  - Are very interested in printing objects but, in the absence of an overt download feature, inexperienced users are thwarted:
    - Unable to cut-and-paste images
    - Using browser print feature with larger-sized images cuts off part of map
    - Not familiar with Window’s right-mouse options
  - A few more experienced persons use the ‘control F’ feature of browsers to navigate documents; this feature does not work with the documents in the Portal
  - One person thought that users were supposed to type in page numbers in the sequence drop-down box, which in the example provided had no value in it
    - It was not obvious to this person that the cover page they were viewing had no value in the sequence drop-down box
  - For the document presented, the sequence drop-down menu had four blank values at the top; however, three of these pages did have numbers (i, ii, iii)
When a user knows a specific page they want to view in a document and the ‘sequencing’ number does not match the actual ‘page’ number, there is a problem locating the specific page.

Flipping forward and backward in multi-page objects by clicking on the right and left edges of the pages is not an obvious page navigation option.

Inconsistent use of bolding and highlighting of search terms:

Inconsistent use of box labels for drop-down menus: sequence and page:
- http://texashistory.unt.edu/permalink/meta-pth-29408:1
- http://texashistory.unt.edu/permalink/meta-pth-29571:1

There is no ‘return to search results’ feature on object pages.

**Suggestions**
- Include an indication of any annotations and a link to comments with the object display.
- Add a commenting feature on the object display.
- Add a citation to the description page.
- Add ‘hits-in-text’ navigation to document object display pages.
- Add ‘return to search results’ at both the top and bottom of all object pages.

**Browsing**

**Preferences**
- The current browse categories (subject, collection, contributor, era, and county) are also categories that users would like to use:
  - To search
    - Two are on the advanced search screen: Collection and contributor
  - To sort/organize/view their search results

---

7 ‘Contributor’ is used in main browse page; ‘Institution’ is used in object descriptions and on the advanced search screen. However, both contain the same list.
• A few participants would like to sort objects within a collection

• Would like to search collections by the same categories mentioned earlier in discussion: location, name, date, type, institution, and historical period

**Suggestions**

• If a finding aid exists for a collection include it; very useful to historians

**Experience**

• There is a great deal of diversity, in terms of computer use and digital photography use, among genealogists

• People with advanced search skills, in particular, Boolean skills and use of quotes for exact phrase searches, want to use those but recognize that others do not have those skills

• People with more computer savvy know how to ‘right-click’ to copy and save images; others use a browser function to print pages, which might not print an entire image

• Many with computer savvy use ‘control F’ to find terms within pages; those without this knowledge need an explicit ‘find-in-page’ feature

• In looking at the thumbnail view of all pages in a document, less experienced researchers might not know to go to the full description to get citation information; might be a good idea to make this more overt for them

• Genealogists research topics in addition to researching family history

• Genealogists travel to locations to use or discover source materials

• Genealogists are used to searching by county or having search results sorted by location; FamilySearch and NARA offer these features
Ranking Results
In conjunction with the focus group discussion, participants ranked their preferences for five object navigation prototypes and for 10 potential new features. To provide perspective, results are reported for this group and for the aggregate of the three focus groups.

Object Navigation Rankings
Participants ranked screen images of the five object navigation prototypes included in Appendix B. Table 2 lists the results for this focus group (N=4) and for all three focus groups (N=19). The ‘Tabs and Widgets’ prototype ranked first (Figure 1), both for this group and all groups.

<table>
<thead>
<tr>
<th>Option</th>
<th>Title</th>
<th>Group (N=4)</th>
<th>All (N=19)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Rank</td>
<td>Average</td>
<td>Rank</td>
</tr>
<tr>
<td>6.5</td>
<td>Tabs &amp; Widgets</td>
<td>1</td>
<td>1.0</td>
</tr>
<tr>
<td>6.4</td>
<td>Tabs &amp; Collapsed Menu</td>
<td>2</td>
<td>2.0</td>
</tr>
<tr>
<td>6.2</td>
<td>Collapsed Menu</td>
<td>3</td>
<td>3.5</td>
</tr>
<tr>
<td>6.3</td>
<td>Widgets</td>
<td>4</td>
<td>4.0</td>
</tr>
<tr>
<td>6.1</td>
<td>Tabs</td>
<td>5</td>
<td>4.5</td>
</tr>
</tbody>
</table>

Table 2. Ranks for Object Navigation Options

Feature Rankings
Participants in the focus groups were asked to indicate, by marking “yes”, “no”, or “don’t know” on a questionnaire, if they would like the Portal to Texas History to allow users to have each of the features listed in Table 3. The results were tabulated and the features were ranked by the percentage of users indicating “yes” for each feature. Table 3 lists the features in rank order, both for participant responses in this focus group (N=4) and for participants in all three focus groups (N=19).
<table>
<thead>
<tr>
<th>Feature</th>
<th>Group ((N=4))</th>
<th>All ((N=19))</th>
</tr>
</thead>
<tbody>
<tr>
<td>Save items (images, maps, letters, etc.)</td>
<td>1 100%</td>
<td>1 100%</td>
</tr>
<tr>
<td>Save search results</td>
<td>1 100%</td>
<td>2 94%</td>
</tr>
<tr>
<td>Access personal search history for an active session</td>
<td>1 100%</td>
<td>3 84%</td>
</tr>
<tr>
<td>Comment on items</td>
<td>1 100%</td>
<td>4 68%</td>
</tr>
<tr>
<td>Annotate images (like Flickr)</td>
<td>1 100%</td>
<td>7 50%</td>
</tr>
<tr>
<td>Add items to personal “favorites”</td>
<td>6 75%</td>
<td>4 68%</td>
</tr>
<tr>
<td>Comment on comments written by others</td>
<td>6 75%</td>
<td>8 44%</td>
</tr>
<tr>
<td>Receive RSS feeds of search results</td>
<td>6 75%</td>
<td>9 42%</td>
</tr>
<tr>
<td>Build and maintain lists of objects</td>
<td>9 50%</td>
<td>6 53%</td>
</tr>
<tr>
<td>Rate items on a historically significant scale</td>
<td>10 25%</td>
<td>10 29%</td>
</tr>
</tbody>
</table>

\(^a\) Some functions had tied ranks.

Table 3. Ranks for New Features

This group comprised roughly one-fourth of the total number of focus group participants. The top four features for all the focus groups are included in the top-ranked features for this group. As with participants in the other groups, this group indicated a strong interest in saving items and a relative lack of interest in rating the historical significance of objects. Likewise the results suggest participants may be interested in one feature that was not discussed: adding items to personal favorites. In contrast to the other groups, this group indicated relatively more interest in annotating images.
Closing

Summary
A presentation of screen shots from the Portal to Texas History guided this focus group discussion through these topics: searching, search results, descriptive metadata, object navigation, and browsing. The participants indicated their preferences and made suggestions for optimizing the Portal’s interface for genealogists. They also identified problems with the existing interface. The key findings follow.

- First-time Portal users are not certain what genealogical resources are on the Portal. Generally this group preferred to use advanced search features, such as phrase and Boolean searches, either from an advanced search interface or from a basic search interface. Location and name searches are very important to genealogists, who are familiar with using wildcards in searching for spelling variations. Alternately, they prefer to use a Soundex feature for name searches. Some thought stemming might produce unexpected and undesirable results for name searches. All users would benefit from some on-screen guidance regarding how to do Boolean searches involving more than one exact phrase or a term and an exact phrase.

- Users quickly scan search results and it would be useful to have search terms highlighted in the search results. In evaluating search results, it would be helpful if the location and institution were identified for each object. For users with lower-speed access to the Web, thumbnails can take a long time to load, in particular when moving between search result pages. However, thumbnails in the grid presentation of search results are useful for quickly reviewing maps and photographs, as well as for locating familiar objects.

- On the search results display, users are not certain what to expect when they click on a thumbnail for a document, although they generally expect the first page of a document to be displayed when they click on its title. They would prefer that clicking on either a document’s thumbnail or the title would bring up the page with the first hit. Users do expect the page with the first hit to be displayed when they select ‘hits in text’.

- In addition to sorting search results by relevance, sorting them by location, especially by Texas County, and by institution would be useful. The key facets for presenting and exploring search results are (1) name, particularly surname, (2) location, particularly county and township, and (3) object type, for example book, map, or photograph.

- Some like having access to the rich descriptive information about objects. It would be of interest to link some of this information to Web mapping applications, for example, to locate an institution. Additionally, users would like to add comments about objects and to view others’ comments. They are willing to register in order to do this. They would also like to report errors.

- Users want descriptive information formatted for printing and available as simple, unformatted text that is easy to copy and subsequently manipulate in other applications. Descriptive information should include a citation that users can readily cut and paste. The minimum
information needed for a citation is an object’s location and when it was accessed. Optimally, formatted citations following standard practices for genealogical research would be available.8

- It is very important to users to both download and print objects. Less experienced users need an overt ‘print’ feature. All are willing to pay for high quality prints.

- The information to display with objects includes: location, date, institution, number of annotations, and a link to any comments. It is important to include a ‘return to results’ feature on all object pages. It is quite important to be able to zoom in on objects.

- Navigating quickly between hits in documents is also quite important as are flexible document navigation features, including navigation among hits and easy access to contents and index pages. All found it helpful to have search terms highlighted on pages containing hits.

- Blank pages within documents and empty values in sequence numbers cause confusion for some users. Locating known page numbers can prove difficult if the actual page number does not match the sequence number for an object. Users suggest the consistent use of ‘page’ versus ‘sequence’ for multi-page objects.

- Users are interested in searching within the Portal’s current browse categories: subject, collection, contributor, era, and county. Specifically within collections, it would be helpful to search by location, name, date, type, institution, and historical period.

- Contextual help should be available for terms and labels. Most users find ‘creator’ and ‘institution’ ambiguous and ‘metadata’ and ‘permalink’ are not terms generally understood by genealogists.

**Future Work**

The findings from this group were subsequently combined with the findings from the two other focus group discussions. An analysis of the combined findings resulted in the development of a set of functional requirements that will guide the redesign of the interface to the Portal to Texas History9. The redesign will be done in a series of releases in 2008 and 2009. Users from genealogical societies in northeast Texas will once again be involved in testing the usability of the redesigned interfaces. Their feedback will continue to guide the redesign efforts that are a core focus of the IOGENE project.

---

8 The emerging citation standard reference for genealogists is *Evidence Explained* by Elizabeth Shown Mills.

Appendix A  Participant Questionnaire

1. What is your gender?   _____ Female   _____ Male

2. What is your age group? (check one)

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>21 - 30</td>
<td>41 - 50</td>
<td>51 - 60</td>
<td>71 - 80</td>
<td></td>
</tr>
<tr>
<td>31 - 40</td>
<td>51 - 60</td>
<td>61 - 70</td>
<td>81 - 90</td>
<td></td>
</tr>
</tbody>
</table>

3. How many years have you been doing genealogical research? ______

4. Please indicate if you hold any of the following professional genealogical credentials.

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Membership in the Association of Professional Genealogists (APG)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Certification by the Board For Certification Of Genealogists (BCG)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accreditation from The International Commission for the Accreditation of Professional Genealogists (ICAPGenSM)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

5. List any other genealogical credentials or affiliations that you have:

6. Please indicate if you would like the Portal to Texas History to allow users to:

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
<th>Don’t Know</th>
</tr>
</thead>
<tbody>
<tr>
<td>Save search results</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Receive RSS feeds of search results</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Access personal search history for an active session</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Save items (images, maps, letters, etc.)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Add items to personal “favorites”</td>
<td></td>
<td></td>
<td></td>
</tr>
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<td>Rate items on a historically significant scale</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Annotate images (like Flickr)</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Comment on items</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Comment on comments written by others</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

7. Please indicate if your browser has:

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
<th>Don’t Know</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flash installed</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>JavaScript enabled</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

8. Your additional comments are welcomed. *(Please use back if more space is needed.)*
Appendix B  Object Navigation Options

6.1 Navigation Options: Tabs

6.2 Navigation Options: Collapsed Menu

6.3 Navigation Options: Widgets
6.4 Navigation Options: Tabs & Collapsed Menu

6.5 Navigation Options: Tabs & Widgets

General Soil map of Texas

- Creator (Map): Carla, William T. (Wilson Thomas)
- Map of Texas, Agricultural Experiment Station
- Map Title: Texas Agricultural Experiment Station
- Date of Creation: 1931
- Physical Description: 1 map : color ; 91 x 112 cm. ; scale 1 inch = 24 miles
- Language: English

- Subject(s): S050 Soil - Texas - Maps, 0270 Soil surveys - Texas, S040 Soil - Texas, S009 Soil - Texas, S030 Soil - Texas, S020 Soil - Texas, S010 Soil - Texas, S000 Soil - Texas, S090 Soil - Texas, S060 Soil - Texas, S080 Soil - Texas, S070 Soil - Texas